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Taking Religion Seriously?

Wentzel van Huyssteen on Rationality in Science and Theology

A Discussion Note on F. LeRon Shults (ed.). *The Evolution of Rationality. Interdisciplinary Essays in Honor of J. Wentzel van Huyssteen*. Grand Rapids, MI. / Cambridge, U.K.: Eerdmans, 2006; xiii + 426 pp., ISBN: 0-8028-2789-6

Abstract

In this discussion note I will critically analyze the work of J. Wentzel van Huyssteen and review the volume *The Evolution of Rationality*, published in his honor. This volume shows the great value and wide influence of the contributions of Van Huyssteen to the fields of 'Science and Theology' and 'Science and Religion' in general, and his postfoundational concept of rationality in particular. However, I will demonstrate that, in his work religion – unlike science – is not taken seriously. Although Van Huyssteen reflects on the specific nature of religion, he does not sufficiently incorporate the results of these reflections into his works. The same fallacy can be found in others who have written on 'Science and Religion' and 'Science and Theology'.

1 Introduction

In celebration of the 65th birthday of Jacobus Wentzel Vrede van Huyssteen, James I. McCord Professor of Theology and Science at Princeton Theological Seminary, a very interesting compilation of essays has been edited by F. LeRon Shults. During his career Van Huyssteen has written on several methodological aspects of the interdisciplinary conversation between science and theology, a broad range of theological topics, and a diverse number of examples exploring the relation between the natural sciences and religion, in particular with respect to evolutionary biology and biblical faith. This short overview of Van Huyssteen's interests demonstrates his conviction that new and exciting discoveries take place on the boundaries between the academic disciplines. In his view, interdisciplinary research does not mean that data and theories can be transferred easily from one discipline to another: theological convictions about the *Imago Dei*, for instance, cannot function in the fields of the life sciences, and scientific theories about human evolution do not necessarily set the agenda for theological arguments. His starting point is that the integrity of every discipline should be protected. From

that position, different disciplines can share concerns and can possibly converge on problems they identify as common.¹

Van Huyssteen's attention for the interdisciplinary conversation reveals his fascination with the results of the sciences and his enthusiasm for the way these results can, first, elucidate religious conceptions and representations and, second, help one to reflect on theological claims. His work leaves no doubt that Van Huyssteen takes the sciences seriously. This is proved not only explicitly by his respect for the results of, for instance, paleoanthropology and genetics but also implicitly by the way he compares the rationality of science and theology. Although he does not make scientific rationality absolute in the sense of a special kind of rationality that stands far above other forms of reasoning, it is still the prototype of human reason. But what about religion? Does he take religious practices and belief systems seriously as well? A quick glance at, for instance, the preface of his dissertation or the theses that accompany it makes clear what can be found in many passages throughout his work.² Van Huyssteen considers himself to be working within the Christian tradition. In this way he does, of course, take religion seriously. However, in this discussion note I will raise questions about the way his view on religion is influenced by the conversation with the sciences. Is it possible that the consequence of his fascination with the results of the scientific disciplines and his discovery that rationality in science and theology share many features, is that the specific character of religious practice has disappeared from view? I hope to answer this question in this article. In doing so, I will focus on an aspect that is often taken for granted in studies in the field of Science and Religion and Science and Theology. In such studies it is usually the case that the results of science are taken very seriously and are considered to have a strong hold on thinking in theology. Scholars in these fields are acquainted with the latest results of, for instance, fundamental physics or molecular biology of the cell, and they try to relate these results to theological statements. For the most part, however, these statements are not coming from religious studies or academic theology; perhaps they are constructed by the scholar herself or they may be the expression of the religious convictions of someone the scholar knows. The concept of religion is then not taken seriously. It simply goes without saying. My aim is to discuss the unreflected use of this concept and thereby to contribute to the debates in these fields.

In *The Evolution of Rationality* – the volume to which this discussion note is related – contributions on Van Huyssteen's interests are divided into three sections: philosophical, scientific and theological explorations. These sections are preceded by an overview of the key themes of Van Huyssteen's work. Throughout the volume the reader can find other paragraphs that summarize the *Leitmotif*

1. J. Wentzel van Huyssteen, *Alone in the World? Human Uniqueness in Science and Theology* (Grand Rapids / London 2006), 9, 154, 219, 238, 270.

2. Idem, *Teologie van die rede: Die funksie van die rasionele in die denke van Wolfhart Pannenberg*, (Kampen 1970); Idem, *Teologie as kritiese geloofsverantwoording* (Pretoria 1986), 47–61; Idem, *Essays in Postfoundationalist Theology* (Grand Rapids / London 1997), 66–69; Idem, *Alone in the World?* 160, 322.

of Van Huyssteen's oeuvre: the development of a postfoundational concept of rationality. From this perspective, the title of the book and the common theme of the contributions – 'the evolution of rationality' – is a logical one. Reflection on the ideas and topics in this volume helps to illuminate the central claim of this discussion note: religion must be taken seriously. Because of some observations in *The Evolution of Rationality* (and a few marginal notes to Van Huyssteen's work), we become acquainted with specific features of the phenomenon of religion, features that make it hard to interpret the relation between science and religion in terms of a 'duet'.

It is a privilege to write this discussion note. In 2001 I was selected for the Doctoral Research Scholar Program at Princeton Theological Seminary. During the autumn of that year I studied under Van Huyssteen's supervision and attended one of his courses on rationality and religion. I remember with gratitude his lively interest in the subject of my PhD, his friendly hospitality to me and my family, his suggestions regarding the best jazz clubs of New York and his enthusiastic description of the section on evolution in the American Museum of Natural History—resulting in an unforgettable visit. My appreciation for his work and person does not imply, of course, that I am uncritical of his writings or the essays in his honor. As a philosopher, it is my obligation to express my appreciation through a critical evaluation of this *Festschrift*. In the next section I will summarize all the contributions of the volume. I will then make some evaluative remarks and finally look carefully at the question if Van Huyssteen takes religion seriously.

2 The Evolution of Rationality

In the first contribution Kenneth A. Reynhout describes the chronological development of Van Huyssteen's understanding of rationality, punctuated by some biographical data. During the first phase (1970–1989) Van Huyssteen was searching for a set of minimal criteria for a credible model of theological rationality. He identified three criteria: theological statements must (i) depict reality, (ii) have critical and problem-solving ability, and (iii) be productive and progressive. This model can be considered a form of critical realism. After this period, Van Huyssteen paid a great deal of attention to the interdisciplinary shaping of rationality in a postmodern context (1990–1999). He developed a 'postfoundationalist model of rationality' in which context, interpreted experience, and tradition are key concepts. Also important is his claim that there are three resources for rationality in science and in theology, namely, (i) the quest for intelligibility, (ii) responsible judgment skills, and (iii) progressive problem-solving. During the last phase of his development (until now) Van Huyssteen has been concentrating on the evolutionary origins of rationality and human uniqueness. The highlight of this period is the publication of *Alone in the World?*—a book that emerged from the prestigious Gifford Lectures.

2.1 Philosophical Explorations

Calvin O. Schrag is one of those authors to whom Van Huyssteen owes a great deal for the development of his thought on rationality. Referring to Van Huyssteen's phrase, 'the turn from foundationalism to holism', Schrag explores how reason plays itself out in philosophical and theological endeavors. He defines the foundationalism vs. holism problem as a fundamental difference of opinion regarding the role of certainty. While foundationalism finds its mission in a quest for certainty, holism is suspicious about any claims to certainty in matters of both knowledge and value. According to Schrag, the concrete lifeworld of human thought, discourse and action can be seen as a model for holistic practices in which pre-theoretical perceptions, feelings, desires and emotions are present. In these practices we find the fabric of our communicative activities: a holistic interplay of acknowledgment, recognition, and repetition. By way of a subtle analysis of the thought of Hegel, Heidegger, Sartre and Kierkegaard, Schrag shows that traces of rationality can already be found on this pre-theoretical level. His contribution can therefore be considered as another argument for Van Huyssteen's claim that the rejection of the epistemological paradigm of foundationalism does not mean an abandonment of rationality *per se*.

How can scientific and theological statements be qualified as empirically reliable and as open to correction? Van Huyssteen has taken up this question during his career, severely criticizing the views of imperialist scientists and extreme postmodernists and – by way of an answer – has developed his own theory of rationality. Although Wesley Wildman appreciates Van Huyssteen's efforts to find a solution to this problem, he thinks the postfoundational theory of rationality is characterized by a significant gap. Using the work of Peirce and Dewey, Wildman criticizes Van Huyssteen's highly theoretical approach. He makes clear that it is far from self-evident that one should – as Van Huyssteen does – simultaneously embrace fallibilism and reject abstract generality. He also claims that the idea of correctability is strangely absent from Van Huyssteen's work, and thus the reader is left with no answer to the question 'Why does reason work?' At this point the pragmatists could have provided Van Huyssteen with an answer. They referred to the so-called 'feedback mechanisms' of varying strengths in different academic disciplines such as theology and physics. According to Wildman, among other things, feedback mechanisms serve to explain the different ways in which disciplines produce consensus. Such mechanisms presuppose metaphysical hypotheses that connect reality to experience and truth to consensus. In Wildman's view, it is the lack of explicit metaphysical reflection in Van Huyssteen's works that causes the gap in his postfoundational concept of rationality.

In 'Rationality and Different Conceptions of Science' Mikael Stenmark explores the extent to which values, ideology, and religion should be a part of contemporary science. Endorsing Van Huyssteen's reflection on the postmodern challenge to rationality, Stenmark scrutinizes the criticism of the value-free view of science and the proposed alternatives. He defines the value-free view as 'the standpoint that science should be autonomous, neutral, impartial, non-responsible, and

non-normative'. This means, first, that values and priorities should be set by the scientists themselves ('autonomy'). Second, it means that science should be a universal enterprise: regardless of, for instance, religious affiliation, everyone may be part of and benefit from science ('neutrality'). Third, it means that moral judgments, ideological claims, or religious beliefs are not valid as grounds for the acceptance of scientific theories ('impartiality'). It means, fourth, that scientists are not responsible for the applications of their theories ('non-responsibility') and, fifth, that science is a matter of facts and not of norms ('non-normativity'). Since this view of science is undermined (by the twofold turn to scientific practice) the question of an alternative conception of science is raised. The rest of his chapter is devoted to a subtle analysis of the proposals of such a 'non-autonomous, partisan, non-impartial, responsible, and normative' conception. Referring to authors such as Helen Longino, Alvin Plantinga, Ronald Giere, and Edward Wilson, Stenmark makes clear that ideological relevance does not imply ideological partisanship, that partisanship does not entail non-impartiality, that biased theories can still be true, and that a crucial difference exists between partisan science and normative science. Because of the distinctions made in Stenmark's contribution, the next step can be undertaken: a discussion of what elements should be contained in a plausible contemporary view of science.

Jerome A. Stone compares the work of Van Huyssteen with two other authors who combine an integrationalist approach (Barbour) with a focus on evolutionary biology: Philip Hefner and Karl Peters. Stone focuses first on methods of the science-theology encounter. Hefner considers engagement with the sciences to be essential for doing theology. For him, this means that theological statements must be formulated as fruitful and falsifiable tentative hypotheses. Peters sees science and religion as two maps of the same area. Science uses empirically based methods to achieve results that are open to public criticism, whereas religions supply wisdom for living. According to this view, no conflicts can arise between these different approaches. Van Huyssteen speaks of overlapping areas of discourse with shared epistemic strategies. For example, both disciplines are embedded in traditions where the same concept of rationality can be discerned. Methods are analogous but different. Regarding substantive issues – Stones' second focus – Hefner concentrates on what he calls the 'created co-creator' and explores trans-kin altruism. Peters writes about God as the process of variation and selection and reflects on human selfhood. Van Huyssteen examines paleoanthropology and, among other things, neurophilosophy in order to reconstruct the theological concept of the *Imago Dei*. Stone concludes that all three scholars are eminently successful regarding the fruitfulness of their work for further research and discussion.

Philip Clayton shows that Van Huyssteen's work acknowledges one of theology's most serious challenges today: the problem of the meaningfulness of religious experiences. Paying close attention to the role of the social sciences, Van Huyssteen insists that theology and the sciences offer alternative interpretations of our experience and that the 'meaning constructions' in theology can be rationally assessed. Although Clayton agrees in the end with Van Huyssteen's

conclusions, he also claims that to come to these conclusions is more difficult than Van Huyssteen acknowledges. Clayton shows this by treating the challenge of functionalism – ‘the fact that people hold religious beliefs is better explained by their function than by their truth’ – in depth. He suggests that we must embrace the results of functionalism and then give a theological account of the social functions of religion. It is in this way that we truly act in line with Van Huyssteen’s starting point: taking science seriously. Clayton suggests that in the human sciences the question of meaning can itself lead to theological issues: explanations of the human being must ultimately reflect on questions of divine nature and intention.

The main statements of ‘Realism, Religion, and the Public Sphere: Challenges to Rationality’ by Roger Trigg are, first, that rationality has to be grounded in reality and, second, that religion appears to be a non-rational phenomenon because many people seem to assume that religion is not about reality. The first statement is endorsed by Trigg. The rational is defined in terms of what people accept. When is a belief acceptable? One must at least know that it is not wrong. Therefore, the idea of an independent reality must be introduced. Without such an idea truth is nothing more than counting heads. The second statement is rejected by Trigg. Since religion is not allowed into the public sphere in modern society, it is considered a private affair—religious claims of universal significance are not accepted. This shows that, unlike science, religion is not considered to appeal to public standards of rationality. The reason for this is the hidden presupposition that religion is not about any independent reality. But why should this assumption be accepted? Trigg shows that this is far from obvious and that anybody who is dissatisfied with the privatizing of religion must argue against it. Only if religion is acknowledged as making claims about reality can it, according to Trigg, claim a place on the public stage.

Keith Ward reflects on the relation between reason and the Enlightenment. Many people seem to assume that Enlightenment thinkers in general would have claimed that (i) reason discloses truth about reality, and (ii) faith is an irrational leap in the dark. Ward shows that philosophers such as Hume, Kant and Hegel dethroned reason – although not completely – and he provokes his readers by stating that the Enlightenment did not raise reason too high but brought it too low. For Hume and Kant, reason is not the ultimate arbiter of faith and, for Hegel, reason must integrate religious belief with other forms of knowledge. Ward concludes that the heritage of the Enlightenment must not be conceptualized as the liberation of the human mind from religious tyranny but as the promotion of the liberty of thought and critical enquiry.

2.2 *Scientific Explorations*

What were the initial causes of the awakening of spirituality? During which stage of human evolution did religion emerge? And what is the nature of these forms of spirituality and religion? These questions are treated in the contribution by Jean Clottes. Regarding the first question, Clottes lists the uncertain answers:

the development of the brain, the increasing degree of social organization, the perfection of tools and the reflection on dreams must all have played a major role. With respect to the question of the emergence of spirituality, the clues belong to three different domains: burials, art, and complex actions. The first traces of evidence – the presence of iron oxides – can possibly be found among the Acheulian culture of *Homo erectus*. By describing some famous caves and sites Clottes shows that we are more certain regarding the Neanderthals: they buried their dead and occasionally deposited offerings with them. With the next step we reach our direct ancestors, the Cro-Magnons: the *Homo sapiens* who entered Europe at about 40,000 years ago. This Palaeolithic people left its drawings on the walls of huge chambers in dark caves such as those at Lascaux. Clottes concludes – without explaining for example the nature of their sacred stories – that the art in the caves was done within the framework of a shamanistic type of religion. Whether the nature of this form of religion can be understood or not remains questionable due to the lack of solid data.

In his article David Lewis-Williams intends to show that we can. In 'Building Bridges to the Deep Human Past: Consciousness, Religion, and Art' he looks for a new method to understand how early human beings thought and how they conceived the world around them. In a case study he explores the way in which ethnography renders explanation of San rock art images (Bushmen of southern Africa) possible. The traditional approach exists in a constant 'to-ing and fro-ing' between San ethnography and the images. Once it became clear that San rock art can be termed shamanistic – and thus has to do with altered states of consciousness – neuropsychology began to play a promising role. Assuming that the human brain and its associated nervous system are universals, the meaning of the paintings found in the Upper Paleolithic caves (where no relevant ethnographical record exists) could be explained. Some geometric images found in San rock art can be seen as expressions of 'wired' experiences of altered consciousness and can be interpreted as beliefs in a spiritual realm. On the basis of a sophisticated kind of analogy, the same geometric images in the Upper Paleolithic caves could also be understood as signs of a belief in passages to the spirit world.

In 'The Origins of Human Cognition and the Evolution of Rationality' Ian Tattersall provides an overview of the emergence of the hominid family. Beginning with the 7–6 million-year-old *Sahelanthropus tchadensis* and ending with the Cro-Magnons, Tattersall shows that behavioral and physical innovation do not proceed hand-in-hand. This means, for instance, that early bipedal hominids did not move beyond the cognitive level of modern apes and that the first stone tool-makers were not significantly different physically from their non-toolmaking predecessors. This changed with the emergence of the Cro-Magnons. The production of symbolic objects distinguished them in a decisive way from their predecessors. Here behavior and physiology are connected: symbolic acts are the outcome of symbolic processes in the mind. Tattersall's conclusion is really about the evolution of rationality: our capacity for rational reasoning is the sum of, on the one hand, old emotional and intuitive centers of the brain, and, on the other, newer structures that permit symbolic thought.

Christopher Southgate relates two issues that at first glance seem to be unconnected: the Cro-Magnon's bison paintings at Niaux and contemporary debates about the Kyoto protocol. These different issues are bound together in his contribution by the work of the nineteenth-century Catholic poet Gerard Manley Hopkins. Hopkins' use of the terms 'inscape' (the scientific and particular features of an entity) and 'instress' (the energy that binds individual entities into the Whole and the impact of inscapes on the observer) are, according to Southgate, helpful in the contemporary conversation between theology and ecology. As a visitor to the Grottes de Niaux, Southgate received 'the full charge of instress of bison', a feeling that, he suggests, must have been inspired by the hunter-gatherers who attached a deeper reality to the bison. However, people can also fail to instress their environment, with the result that they forget to preserve it. In Southgate's view, science and theology can help to reverse this situation: science by giving us the right information and theology by providing us with the right ethical imperatives so that we are 'consciously instressing God's creative activity'.

In 'Generating Life on Earth: Five Looming Questions' Holmes Rolston III writes that in order to survive, organisms need to gain, use, and transmit vital information. For human beings there is a supplementary condition: 'to figure out five big unknowns'. Vital information, such as proactive information recorded in the genes, is needed in enormous amounts. Where does it come from? Science has no clear answer for this mysterious genesis. In addition to the question about the creation of information, Rolston reflects on the question if evolutionary history is entirely contingent or quite probable. Among other things, the well-known positions of Simon Conway Morris ('the inevitable and pre-ordained trajectories of evolution') and Stephen Jay Gould ('we are the accidental result of an unplanned process') are explained. The third question concerns the way the information became possible: was it always there or did it emerge during history? Rolston seems to favor the latter possibility: co-option generates novel possibilities. But then another question comes to the fore, where is such a tendency located? If biology were anthropic, we could possibly provide an answer to this question. But since we do not know this, the final question concerns the explanation of the appearance and emergence of humans. Pondering these five unanswered looming questions, Rolston suggests a sixth: Does evolution leave room for faith in God? According to him, nothing prevents us from 'praising the Spirit in, with, and under nature'.

Michael Ruse's starting point in his contribution entitled 'Darwinism: Foe or Friend' is the claim that a progressive understanding of Darwinism does not imply atheism but supports Christian theology. Therefore, it is not necessary to 'quail or quake before the onslaughts of the non-believers'—something he fears Van Huyssteen does now and then. In his view, Darwinism, as the true evolutionary theory, must be the starting point for theology. It is remarkable that Ruse, in his provocative style, uses the ideas of Richard Dawkins – *the* atheist – to underpin his claim. From his perspective, Dawkins is a evolutionary progressionist who thinks that the process of evolution can be reconstructed as a hierarchy of organisms with humans (because of our consciousness) at the top of the scale. This is precisely

what many Christians have maintained during the last 2000 years. Thus, Ruse concludes that 'the Christian should welcome the writings of Dawkins, not fear them'.

In 'Rationality and Interpreted Experience: The Efficacy of Phenomenal Consciousness' Michael L. Spezio claims that phenomenal consciousness (first-person experience of agents) plays an important role in human rationality and that it is even crucial for the rationality of fundamental personal decisions. The most important argument for the importance of phenomenal consciousness in rational decision-making is that mental time travel is required for a rational choice and that such a thing cannot exist without first-person experiences. Spezio argues that a neuroscientific analysis of phenomenal consciousness can help to work out a postfoundational account of rationality. Although Van Huyssteen already included the concept of 'interpreted experience' in this account, Spezio suggests that it can be developed further by realizing how first-person experiences such as 'imagined tragedies and envisioned triumphs' determine the formation of our commitments.

New developments in science can cause threats to accepted understandings of the self. As Van Huyssteen notes, the traditional religious self-perception – from moral perfection in paradise to sinful persons after the fall – was modified by the development of evolutionary theory. In line with this, John Hedley Brooke asks the question 'What difference did Darwin make?' concerning several aspects of human self-understanding. In addition to the dignified and the rational knowing self (see below), Brooke considers the unique, the immortal, the moral, the aesthetic, and the suffering self. Does man preserve his dignity if he is seen as ape-like? From the perspective of traditional Christian understanding, Samuel Wilberforce, the Bishop of Oxford in Darwin's time, argued that he does not. Brooke shows that the Darwinian challenge was not a unique one. A few decades earlier similar debates had occurred but then between Lamarck and Lyell. Although such discussions took place from time to time, Brooke claims that they were not typical for their time. Science challenged the dignity of the self, but human beings were still seen as unique because of those attributes that distinguish them from other living beings. One of these attributes is the faculty of reason. In Christianity this faculty served to differentiate humans from other creatures and it made natural theology possible. Darwin accused natural theologians of arrogance and evaluated this theological enterprise as incurably anthropocentric. But again, Brooke demonstrates that straight lines in history are rarely found. Is it really Darwin's argument that makes all the difference? Before him, the criticism by Hume and Kant of natural theology was more foundational. And after Darwin revealed the processes of natural selection, natural theology did not at all disappear. Through his accurate historical analysis, Brooke demonstrates that the supposed irresolvable conflict between the so-called incommensurable worldviews of science and religion can be regarded as a simplistic construction.

2.3 Theological Explorations

In 'How Music Models Divine Creation and Creativity' Arthur Peacocke suggests that certain kinds of relationships might begin to explain the origin of the universe with time. It is Peacocke's conviction that such a relationship exists between creation by God as *creatio ex nihilo* and Haydn's 'The Representation of Chaos'. This piece – one of the first examples of the Classical style of the 1790s – creates the impression of formlessness and leaves us with a sense of mystery. Although a critical analysis shows that it is not entirely formless, Haydn's work can give rise to an experience of timelessness, and this experience gives insight into the circumstances of the very existence of our universe. Musical examples concerning rhythm can give precision and meaning to another aspect of creation: the way the potential can become actual. Peacocke offers other examples in which the comparison between music and creation emerges: the way in which musical forms are created out of notes (the building blocks of melody, harmony and timbre), meter and rhythm is, to a certain extent, comparable to the creation of life out of atoms, molecules, living cells, etc. By making these comparisons, Peacocke tries to render the assertion of God as Creator intelligible.

Delwin Brown discusses four different ways of locating God: God as source, God as agent, God as incarnate, and God as goal. Each of these understandings of God in Christianity is related to a specific form of religious practice or 'spirituality'. When God is seen as the source, God is located as the ground of all that is. A sense of wonder and gratitude accompanies this perspective as well as the heritage of the apophatic tradition. If the emphasis is on God as agent, divine power and action come to the fore. The intellectual challenge is to discover the divine purposes and the practical one is to translate them into human action. This perspective is commonly associated with systematic theologies. To say that God is the Incarnate means that God is present in the world, not only in Christ but always: God is fully at one with humanity and with creation. Dietrich Bonhoeffer and Harvey Cox can be seen as theologians who represent this view. From the point of view of God as goal, God is located in the future. Central to this perspective is the message of the Kingdom of God. The practical consequence – life lived in active hope – is expressed in political theologies and in theologies of liberation. At the end of his contribution, Brown suggests that there may be a tension between the four irreducible perspectives and our desire for rationality.

By way of a thought experiment, Niels Henrik Gregersen confronts Wentzel van Huyssteen with Pascal Boyer by asking how a postfoundational theologian could deal with the challenges and possibilities of evolutionary psychology. From the hypothetical character of this question it follows that Gregersen wrote his contribution after the publication of *Alone in the World?* where Van Huyssteen critically discusses Boyer's work. In Boyer's theory of religion, religious concepts are constructed by blending information coming from templates ('aggregates of memory') such as 'natural object' and 'person'. The result of this blending is counterintuitive in relation to the activated template. Thus (human) persons are born, but God is not. So the template 'person' is qualified when applied to God.

Gregersen – acting as a postfoundational theologian sharing Van Huyssteen's view – claims that Boyer's evolutionary psychological theory can only explain the likelihood of religious belief and not the particular shape of a specific religious tradition. Furthermore, Boyer, as an evolutionary psychologist, is not able to evaluate the validity of religious beliefs nor assertions about religious realism. With respect to the rationality of religious beliefs, Gregersen writes that Boyer's primary focus on religious concepts and mental representations falls short of other important aspects of religious commitments: the question of the meaning of these concepts, the way they are socially embedded in the lifeworlds of the believers, and the pragmatic dimensions of religious communal life.

Richard Robert Osmer explores the potential contribution of Van Huyssteen's transversal model of interdisciplinarity to practical theology. Osmer characterizes contemporary practical theology as a discipline that 'investigates [Christian] praxis empirically, interprets it to better understand and explain its patterns, constructs a theological framework with which it can be assessed critically, and provides practical models and guidelines for its future conduct and reform'. It is easy to understand that a dialogue with other disciplines (such as therapeutic psychology, educational studies, critical social theory and rhetoric) takes place at every stage of research. After reflecting on the nature of the social sciences, Osmer suggests that three different interdisciplinary approaches are currently at play regarding practical theology's relationship to the social sciences: the correlational approach, the transformational model, and the transversal approach. The last one is more person- and perspective-specific compared to the first and does not, as the second tends to do, separate practical theology and social science from each other in advance. Osmer believes further reflection is needed regarding the transversal approach. He suggests that theological clarification can be achieved by including a more robust dialogue with Christian eschatology, redemption, and the ecclesial mission.

In 'The Psalms and the Lyric Verse' F.W. Dobbs-Allsopp analyzes the language of Hebrew poems. By reviewing several lyric practices and tendencies from the perspective of biblical scholarship, he succeeds in sharpening and extending the understanding of the internal workings of psalmic verse. According to scholars such as Frye and Alter, the Psalms are a kind of non-narrative, non-dramatic, end non-representational kind of poetry. Unlike these scholars, Dobbs-Allsopp does not try to show how Hebrew poetry moves toward narrative but how it swerves away from narrative. As characteristics of lyric discourse, he mentions its hymnic nature, associative working, evocative power of words, meter, rhythmic devices, inclusions, chiasms, refrains, lineation, parallelism, word repetition, vocality, utterability, musicality, parataxis, and sequence. By describing lyric thinking in this way, he concludes that it is one of our reasoning strategies, 'a thinking otherwise'.

David Fergusson critically explores different types of natural theology. First, he shows that all natural theology is context-dependent. This means, for instance, that the design argument is conceptualized differently before and after 1859, that the function of this argument depends on the way the relation between theol-

ogy and science is postulated (e.g. as complementary or as competing types of explanation), and that it depends on the socio-historical context in which it is used. Next, he discusses five functions of natural theology: a foundational one in modern epistemological projects, a deistic one to demonstrate religious truth, one presenting proofs of general revelation (Thomas Aquinas), the apologetic function of defeating objections to the Christian faith, and the one that shows that essential claims of revelation can coexist with scientific knowledge. Fergusson concludes by assessing the standard criticism articulated by Karl Barth on the enterprise of natural theology ('knowledge of God can only be found in Christ'). While the first three types are immediately excluded, the last two types can be understood – even in a Barthian vein – as necessary for the church's pastoral and educational work.

In 'Public Theology in Postfoundational Tradition' George Newlands explores the relevance of Van Huyssteen's work for public theology. A postfoundational approach to public theology means that an intelligent balance must be found between, on the one hand, an essentialism that freezes all identities and, on the other, a value-free perspective in which there are no viable truth conditions. Bearing in mind some postfoundational considerations, Newlands examines the relationship between Christology and human rights, using as his case study the striking transformation and reconciliation that occurred in South Africa, Van Huyssteen's native country. According to Newlands, a postfoundational approach – with its emphasis on the contextual as the way into the universal and the specific point of need as the clue to reconciliation – can offer a highly sophisticated and deeply illuminating conceptual framework for desperate problems of human rights and human salvation.

The book ends with 'A Complete Bibliography of Works by J. Wentzel van Huyssteen'.

2.4 *Evaluation*

Van Huyssteen should be quite happy with the publication of this volume. It is a very rich book in many ways. The authors cover a wide range of subjects—not only in the field of science and theology but also in philosophy, the life sciences and theology. In all three sections the reader finds original and fascinating contributions from important authors, most of whom are authorities in their disciplines. The book is a carefully edited hardcover edition with a beautiful dust jacket. The only complaint so far might be the absence of female contributors. This shortcoming is compensated only minimally by the many references to Hester, Wentzel's amiable wife. This is not to say that she is not worth mentioning – on the contrary – but the reader will, of course, ask herself if the disciplines mentioned above are occupied by male scholars only.

Something must be said about the division of the essays into three sections. For some of them, it is immediately clear why they are labeled 'philosophical', 'scientific' or 'theological' (e.g. the essays of Schrag, Tattersall and Osmer, respectively). For others, it is not. The contribution by Southgate, for

instance, could also be called theological, and Spezio's essay could be considered a (neuro)philosophical exploration. From a Christian point of view, the essays written by Ward, Ruse and Gregersen can be regarded as apologetic contributions loaded with arguments against cheap criticisms of the Christian faith. In spite of this similarity, these essays are found in the three different sections. The editor recognizes the problem of classifying the contributions in philosophical, scientific and theological explorations. According to him, the sections do not form water-tight compartments but are all located in the field of interdisciplinary dialogue. So almost every contribution concerns issues that belong to the field of philosophy, the field of science and the field of theology. In LeRon Shults' view, '... the tripartite organization is intended to respect the way in which the contributors begin with and/or focus on one dimension of the interdisciplinary dialogue' (x). I doubt if this criterion can really justify the classification of every single essay. I think that in cases of doubt it would have been better to consider the background of each author. The essay by Southgate, an honorary university fellow in theology, would then have been placed in the third section and the essay by Ruse, a professor of philosophy, in the first section. This strategy would not have prevented all organizational problems, but some could have been avoided.

Another question concerns the unity of the volume. Is the 'evolution of rationality' really the central theme shared by all the essays? If this term is understood as consisting of two different concepts, 'evolution' and 'rationality', and if 'evolution' is then understood as '(evolutionary) biology' and 'rationality' as, among other things, 'the features of a pattern' and 'the logic of discourse', then every contribution concerns the central theme. However, if the term 'the evolution of rationality' is explained in a strict sense as the emergence and development of our capacity to argue and to reason, then only one essay truly deals with this theme, namely that by Ian Tattersall. Many of the other essays can be linked to this theme in looser way. But, the connection is problematic regarding some of them. The essays by Arthur Peacocke and David Fergusson are not about (evolutionary) biology nor about rationality, Delwin Brown's contribution poses a question about the rationality of the four irreducible perspectives on God only at the very end, and F.W. Dobbs-Allsopp describes the discourse of the Psalms as a mode of thinking while also claiming that some poems do not even construct an argument (353), thus – I would say – leading to the conclusion that lyric thinking is not a way of *rational* thinking. This is not to say, of course, that these essays are not worth reading nor that they do not concern the broad topic of 'science and theology', but I like to observe that the concentration of these contributors on the central theme would have improved the unity of this volume.

3 Taking Religion Seriously?

There are, of course, many ways in which the contributions to this volume can be subdivided. From the perspective of the scholar who is honored by the publication of this book, it would be interesting to order them in the way that they relate to his work. One can thus answer the question if Van Huyssteen takes

religion seriously. I suggest a division into five parts. The first part would consist of contributions that are related to Van Huyssteen's works only because they concern themes that are also present in his oeuvre: those by Peacocke, Brown, Dobbs-Allsopp and Ferguson.

The second part would include the essays by Reynhout, Schrag and Stone. These essays can be characterized by the fact that they pay attention to key themes in Van Huyssteen's work without challenging his conclusions. In Reynhout's case, this is logical because his aim was to give an overview of the main developments in Van Huyssteen's thought. Schrag and Stone had the opportunity to raise questions regarding Van Huyssteen's concept of rationality or his methodology for comparing science and religion, but at most they broaden his results by referring to classical thinkers in philosophy (Schrag) and by comparing his work to contemporary scholars in the field of science and theology (Stone).

The contributions to be included in the third part are characterized by a loose connection to Van Huyssteen's publications. The essays by Stenmark, Trigg, Ward, Clottes, Lewis-Williams, Tattersall, Southgate, Rolston, and Brooke are all about an aspect of Van Huyssteen's work, and explore, from that starting point, their own research interests. The point of departure for the essays by Stenmark, Trigg and Ward is Van Huyssteen's postfoundational concept of rationality. Stenmark meticulously analyzes concepts that are related to the value-free view of science and its alternatives, Trigg clearly reflects on the relation between reality and rationality, and Ward presents an original exposé of Enlightenment philosophers on reason. The contributions by Clottes, Lewis-Williams and Tattersall share Van Huyssteen's interest in human evolution. They show what science can tell us about the emergence of symbolic thought and religious imaginings and representations. Like Van Huyssteen, Southgate and Rolston write on more general developments in biology. Although their interests – in ecology and information biology, respectively – diverge from Van Huyssteen's, they all apply their scientific knowledge to theology and personal faith. Finally, Brooks elaborates on Van Huyssteen's work on human uniqueness via a historical analysis of thinking about the self.

The essays that belong to the fourth part apply Van Huyssteen's thought to fields he did not explore himself (at the moment of the writing of these contributions). Spezio relates Van Huyssteen's key concept of 'interpreted experience' to the neurosciences,³ Gregersen connects the concept of postfoundational theology to evolutionary psychology,⁴ and Osmer and Newlands explore the implications of this concept for the fields of practical theology and public theology respectively.

The fifth and last part would consist of essays containing an explicit critical view of Van Huyssteen's work and with some indications for further research. Of course, many of the essays can be characterized by the last mentioned feature. The contributions by Gregersen and Trigg, for instance, contain fruitful suggestions: the first on the possibility of (further) integrating embodied cognitive science

3. In *Alone in the World?* 88, 256–261 Van Huyssteen deals with this subject himself.

4. In *Alone in the World?* 261–267 Van Huyssteen himself criticizes the position of Pascal Boyer (and refers to Gregersen's criticisms!).

into a postfoundational concept of rationality and the second on the need to endorse certain assumptions regarding religious claims. However, these essays do not really challenge Van Huyssteen's conclusions. As far as I can see, only Ruse, Clayton and Wildman do so. In a provocative style and with a good sense of humor, Ruse encourages Van Huyssteen (and others) to rethink the relationship between Darwinism and Christianity and, in particular, stimulates Christians to reevaluate the writings of Dawkins and other atheists. The criticisms by Clayton and Wildman are more severe than Ruse's evaluation and are even of vital importance for the relationship between science and religion. Clayton refers to what he rightly calls a crucial passage in *The Shaping of Rationality*: it concerns an 'important epistemological overlap between theological and scientific modes of inquiry: we relate to our world epistemically only through the mediation of interpreted experience, and in this sense it may be said that theology and the sciences offer alternative interpretations of our experience.'⁵ But, as I like to add, since *The Shaping of Rationality* does not contain specific examples of the mediation of interpreted experience in science and theology, we do not know exactly what such an overlap means and what the consequences are for human self-conception or for theological truth claims. To say that the heavens are God's work and to claim that the large hole (the foramen magnum) in the skull fragments of *Sahelanthropus* is evidence of bipedality are both examples of interpreted experience. So what? Do the arguments for the second statement make the first more plausible? Or is the validity of the second one diminished by the speculative character of the first? It is simply not clear what conclusions can be drawn.⁶ That is why Clayton raises questions about the possibility of giving a rational assessment of the efforts of individual persons to interpret their experiences in a meaningful way. Can this task really be accomplished and is it appropriate that Van Huyssteen pays no attention to its possible failure?

With his comment on the absence of the idea of correctability, Wildman goes to the heart of the matter. Although he situates his criticism in the context of Van Huyssteen's unwillingness to entertain metaphysical hypotheses, he also reflects upon the variations in strength of the feedback mechanisms throughout the different academic disciplines. According to Wildman this makes reality seem fuzzy. 'This is nowhere more true than in religion but there are elements of it even in fundamental physics, or wherever the feedback mechanism is weak or non-consistent' (45). Speaking about 'possible failure' in Clayton's sense can thus be related to the feedback mechanisms about which Wildman is writing. One

5. J. Wentzel van Huyssteen, *The Shaping of Rationality: Toward Interdisciplinarity in Theology and Science* (Grand Rapids / London 1999), 184.

6. Edwin Koster, *In betovering gevangen? Over verhaal en rationaliteit, religie en irrationaliteit* (Budel 2005), 411-18, in particular 417f. There are indications in Van Huyssteen's work in which he explicitly suggests refraining from abstract or 'high theology'. Instead, he recommends rereading the biblical texts: *Alone in the World?* 149; cf. the 6th proposition of his thesis (translation EK): 'The question whether the Christian message is true or false can be answered only by referring to the content of that message.' Unfortunately he did not follow his own suggestion in *The Shaping of Rationality*.

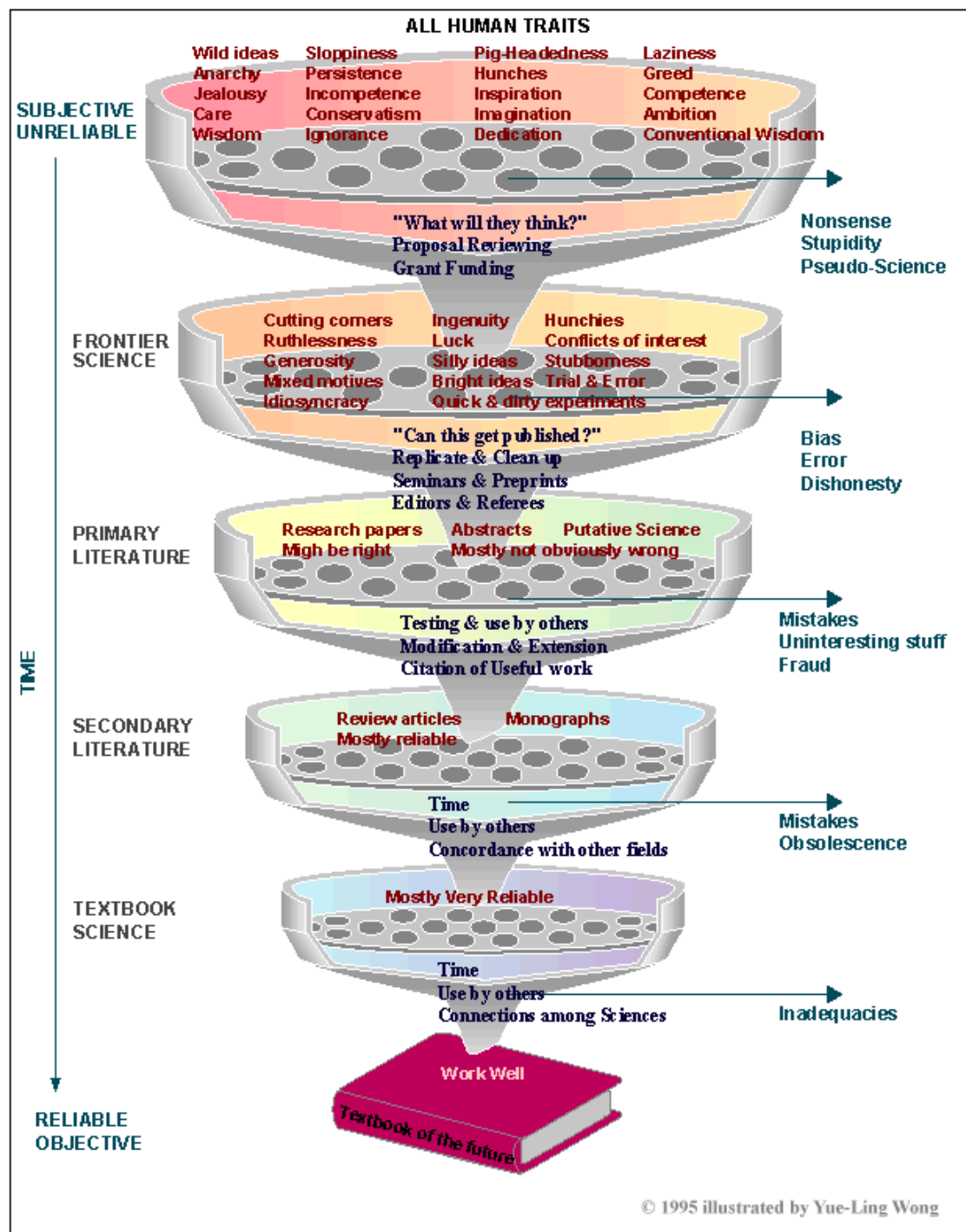


Figure 1: The Knowledge Filter. From: Henry H. Bauer, 'Ethics in Science', <http://www.files.chem.vt.edu/chem-ed/ethics/hbauer/hbauer-toc.html>.

way to present these feedback mechanisms in science is by way of the so-called 'knowledge filter'.⁷ The filter consists of different levels. The first contains all kinds of suggestions concerning the achievement of knowledge: conventional wisdom, facts mentioned in newspapers, beliefs, folklore and expert opinions. If all nonsense, stupidities and pseudo-scientific claims are removed from this set of statements – are 'filtered out' – we enter the second level, called 'frontier science'. Here we find science in the context of discovery: the daily practice of scientific research.

After discussing ideas with fellow researchers, presenting preliminary results at conferences, and consulting senior scientists about the conclusions, one can try to publish the results in a scientific article that is submitted to a journal. If it is accepted and has thus passed the threshold called peer review, we enter the level of 'primary literature'. Matters of bias, error and dishonesty should then be filtered out. We then go to the next levels, called 'secondary literature' and 'text-book science', as long as the results (i) of the original enquiry can be replicated, (ii) are in accordance with the results in other fields of the same discipline and, (iii) match the results in other disciplines. Thus, through all kinds of feedback mechanisms, deficiencies are eliminated and only reliable results survive. The question, of course, is if this filter really operates in the practice of scientific research. It can be shown, for instance, that the filter functions as expected regarding theories about human evolution—for example the competition between the 'Out of Africa model' and the 'multiregional hypothesis'.⁸ However, in case of testing medicines, it is otherwise. Feedback mechanisms, such as replications by independent scientists, are rare in the pharmaceutical industry. Various regulations are necessary to compensate for the disadvantages of commodified research.⁹ Thus, the knowledge filter does not automatically produce reliable results in the life sciences. It can be expected that the effect of subjective distortions increases with the humanities in comparison to the natural sciences. However, for example, it can be demonstrated in history that incorrectly formed results, distorted by, for instance, false subjective preferences, can be eliminated most of the time.¹⁰

Therefore, it may be assumed that, to a certain degree, the knowledge filter functions properly in scientific practice. Does this conclusion also hold for religious studies? What about claims in theology and the study of religion? Do similar feedback mechanisms, which prevent the production of unreliable claims, exist in these academic fields? Does the knowledge filter work here as well? The suggestions by Clayton ('the rational assessment of theological claims is not so

7. Henry H. Bauer, *Scientific Literacy and the Myth of the Scientific Method* (Urbana 1992), 42–51.

8. Edwin Koster (ed.), *Wetenschapsfilosofie. Een inleiding voor levenswetenschappers en medici* (Amsterdam 2009).

9. Cf. the contributions in Hans Radder (ed.), *The Commodification of Academic Research: Analyses, Assessments, Alternatives*, (Pittsburgh 2009).

10. Edwin Koster, 'Historical Understanding and Judgment: On Intentional Explanation, Colligatory Concepts and Narrative Exposure', in: H.W. de Regt, S. Leonelli and K. Eigner (eds.) *Scientific Understanding. Philosophical Perspectives* (Pittsburgh 2009).

easy to accomplish') and Wildman ('the strength of the feedback mechanisms in religion is weak or non-existent') does leave ample room for positive conjectures. In my view, the transcendent dimension of religious practice makes it hard to see how religious experiences, behavior, conceptions and representations can indeed be tested. Of course, something can be said about the way they fit into the totality of a religious tradition, and religious narratives can, for instance, be considered as 'empirically fitting' existential experiences. Thus, after a disaster like a tsunami, praying to God to be with the victims may be in accordance with certain kinds of convictions ('God is not present in destroying events', 'God suffers when his people suffer', 'God is a source of comfort') and practices (to pray in difficult situations, to put one's trust in God in all circumstances) in one's religious tradition. Arguments can also be given for the fact that this experience matches biblical stories such as the one about Job. So, (i) reasons can underpin the claim that certain religious conceptions, representations and practices belong to a specific religious tradition, and (ii) a rational assessment can be given for the claim that these conceptions, representations and practices pass the test of empirical fit. But since religious traditions are heteronymous configurations with a wide scope, convictions that contradict each other can belong to the same tradition. So, another Christian believer could thank God for punishing his people for their sins through the tsunami. It is possible to show that this conviction is also in accordance with elements of the religious tradition involved ('God hates sinful behavior', 'Sinners don't get away scot-free', 'God acts according to his will') and that the underlying experience matches many biblical stories such as the tragic ones about King Saul. Thus, in some way it can be said that 'feedback mechanisms' exist to test these claims. But how are we to judge the claim that 'God is with the victims' or the claim that 'God punishes his people'? Believers sometimes want to know if their convictions are more than mere illusions. It does not seem possible to construct a feedback mechanism to 'test' this kind of religious utterance. The data do not exercise any control at all on the religious interpretation with respect to such claims. In other words, they cannot be rationally justified. The transcendent dimension prevents such efforts, either because it is the pure product of human imagination or because it is really transcendent and thus beyond human reason.¹¹

It is not my intention to suggest that Van Huyssteen thinks such claims can simply be rationally assessed. On the contrary. If one of the many authors to whom he refers in his books includes God as an explanatory factor, he is the first to protest. Van Huyssteen considers such a claim to be '*theologically* problematical because it does not take into account the power of imagination, and the spectacular ability of the human mind to delude itself'.¹² According to him, religion is characterized by 'a high degree of personal involvement and commitment', 'a radical contextuality of its experiences', 'the symbolic structure of its convictions and practices', and by '... an element of mystery ... [as] the most crucial and telling difference between theology and the sciences. This kind of mystery is unique to the experiential

11. Koster, *In betovering gevangen?*, 399–427.

12. Van Huyssteen, *Alone in the World?* 106.

resources and epistemic focus of theology, and very definitely sets it apart from the very focused empirical scope of the natural sciences.¹³ However, in other sections of his writings Van Huyssteen emphasizes that the difference between science on the one hand and theology and religion on the other are quite small. For example: 'Despite many important differences between these two reasoning strategies, I see this epistemic goal of experiential accountability playing out as only a gradual difference between *empirical adequacy* for science, and *experiential adequacy* for theological understanding, respectively.'¹⁴

It is hard to see how these different kinds of statements can be coherently connected. If I see it correctly, I agree with Clayton and Wildman on this issue: Van Huyssteen sometimes gives the impression of underestimating the specific character of religion. In this sense, I think he does not take religion seriously enough. Although theologians must be pressed most of the time to take science seriously, it must not be forgotten that it is necessary to take religion seriously as well. In my view, this is a valid and important point of criticism in the field of 'Science and Religion' and 'Science and Theology'. If, for instance, religious convictions or practices are confronted with scientific statements, it is sometimes unconsciously assumed that they can both be seen as forms of 'knowledge'. But it is far from self-evident that we can speak of 'knowledge' in the case of religion. Reflection on the nature of knowledge and on the nature of religion is necessary before one is able to confront elements of these different approaches to reality. Another example is the vehement discussion on evolution, creationism and intelligent design. The discussants usually interpret the first chapters of Genesis as a report about God acting as a causal factor and thus do not take account of the 'latest results' in exegesis and biblical theology nor of the specific nature of these biblical narratives.¹⁵ A last example is related to what I have been calling 'the different approaches to reality in science and religion'. It is sometimes assumed that science concerns facts, and religion concerns not facts but such things as moral behavior or the meaning of life. But how do we know this? In the fields of 'Science and Religion' and 'Science and Theology' scholars rarely refer to empirical studies of religious practices. What these scholars have to say about the nature of religion seems to be their own normative stance ('(I believe that) religion is not about facts') and not the results of scientific research regarding really existing practices. In the end, not only is the scientific study of religion not taken seriously then, but religion itself is not taken seriously either. Van Huyssteen should also take religion more seriously in the sense that he has to clarify how his remarks on the specific nature of religion can be related to his claims about the small differences between these phenomena. Only if he specifies his position more clearly can a deliberate answer be given to the question how science and theology are related. Up until now he seems to choose mainly for a 'duet' relationship. The question is whether this relationship has to be described as a 'duet' or a 'duel' if religion is taken seriously.

13. Idem, *The Shaping of Rationality*, 115, 162, 219–221, 259f. (quotation on page 220).

14. Ibidem, 181, 183 (quotation), 188v, 231. Cf. Van Huyssteen, *Alone in the World?* 159, 264.

15. Koster, *In betovering gevangen?*, 223–331.

How is one to assess this relationship if religion is seen as an irreducible symbolic practice or as a hermeneutical whole in which existential questions about, for instance, contingency and mortality are raised? By focusing on its specific character, religion may reveal its own form of rationality—in spite of its common resources with other practices.

I am aware that my remarks are very marginal compared to the rich volumes and articles by Van Huyssteen on this subject. They are not meant, of course, to harm the reputation of the scholar who is honored by this volume. I hope instead that this discussion note also contributes to honoring Van Huyssteen's work by exploring new ways of thinking about the relationship between rationality and religion.